The table 3 is used to sequentially align the specimen reservoirs 15s with the specimen dispensing position 9 to permit the specimen dispensing mechanism to dispense the specimens sequentially into the specimen reservoirs 15s.

Thus, the test-specimens are dispensed automatically.

After the specimens are dispensed into all the specimen reservoirs 15s of the electrophoretic chips 1 arranged on the table 3, an electrode is arranged to each of the reservoirs 15a, 15c, 15s, and 15w of each of the electrophoretic chips 1. The voltage application part is used to apply a predetermined voltage to thereby introduce the specimen contained in the specimen reservoir 15s via the specimen introducing passage 11 into the separation passage 13, through which the specimen is separated and migrates electrophoretically toward the anode reservoirs 15a in the separation passage 13.

For example, a detector for identifying, for each separation passage 13, and detecting a separated component near the anode reservoir 15a of each of the separation passages 13 is arranged, thus detecting the separated component of the specimen. The detecting method, however, is not limited to this; for example, such a detector may be used that detects a distribution of separated components of a specimen within a predetermined range of the separation passage 13 after the specimen is separated and stopped in electrophoretic migration in the separation passage 13.

Thus, by the present embodiment, a plurality of electrophoretic chips with a simple passage configuration can be used to analyze a plurality of test-specimens simultaneously. By decreasing the number of the separation passages per electrophoretic chip and using a plurality of the electrophoretic chips, a high throughput can be realized. This simplifies the manufacturing of the electrophoretic chips, thus enabling increasing the yield in the production of the chips.

Although the present embodiment has used a plurality of the electrophoretic chips 1 having the same configuration, the invention is not limited to it; for example, a plurality of kinds of the electrophoretic chips 1 having different effective electrophoretic length of the separation passage may be arranged on the

table 3. This enables simultaneous analysis of a plurality of test-specimens under the condition of the multiple effective electrophoretic lengths.

Although the present embodiment has arranged a plurality of the electrophoretic chips 1 on the disk-shaped table 3 constituting the electrophoretic-member holding part, the invention is not limited to it; for example, the electrophoretic-member holding part may be of any configuration as far as it can hold a plurality of electrophoretic chips at a time.

Furthermore, the electrophoretic member that can be used in the invention is not limited to such an electrophoretic chip 1 that is described in the present embodiment but may be such that is provided with only one or a plurality of separation passages.

In the present embodiment, the electrophoretic-member holding part has a function to hold a plurality of electrophoretic members on a planar member to then rotate this planar member in a plane in which these electrophoretic members are held in order to sequentially arrange each one end of the passages of the plurality of electrophoretic members sequentially at the specimen dispensing position and also is provided with a dispensing mechanism for dispensing specimens into holes corresponding to each one end of these passages arranged at that specimen dispensing position, thus enabling automatically dispensing specimens.

For detection in an electrophoretic apparatus, typically a specimen is labeled in a fluoro-metric manner beforehand and thereby detected by a fluoro-metric method.

Although there are many types of the fluorescent-light detecting device, a fluorescent-light detecting device preferred in order to realize a high S/N ratio of a detection signal is such that includes a first optical system for focusing, for image formation, a light from a detecting region into a slit hole and a second optical system which is provided with at least reflection-type diffraction grating to separate a light from the slit hole in order to form an image on a detection element.

FIG. 3 is a partial perspective view for showing an embodiment of an electrophoretic apparatus equipped with such a fluorescent-light detecting device, showing only one electrophoretic chip.

The electrophoretic chip 1 is such as shown in FIG. 2, in which it is held on an electrophoretic-chip holding table 4 with its surface in which the reservoirs are formed facing upward. The electrophoretic-chip holding table 4 corresponds to the multi-chip turn table 3 of FIG. 1. The electrophoretic-chip holding table 4 is provided with a Pertier-effect temperature regulation mechanism 45 for regulating the temperature of the electrophoretic chip 1. Opposite the Pertier-effect temperature regulation mechanism 45 is provided a fan 47 for ventilateing the Pertier-effect temperature regulation mechanism 45. An electrophoretic chamber lid 49 is provided to cover the surface of the electrophoretic-chip holding table 4 on which the electrophoretic chip 1 is held.

Near the electrophoretic-chip holding table 4 are provided a polymer-injecting port 51 and a polymer-injecting syringe 53 for injecting a polymer as an electrophoretic medium into the passages and reservoirs of the electrophoretic chip 1 held on the electrophoretic-chip holding table 4.

On the surface side of the electrophoretic-chip holding table 4 on which the electrophoretic chip 1 is held is provided an electrode 55 for each of the reservoirs 15a, 15c, 15s, and 15w of the electrophoretic chip 1 for applying a voltage on the liquid contained in these reservoirs. Each electrode 55 is connected to a high-voltage supplying part 17 for supplying a voltage thereto.

As a light source of the fluorescent-light detecting device is provided an excitation light-source laser device 19. The laser device 19 may be of a variety of types such as argon (Ar) laser, kripton (Kr) laser, helium-neon (He-Ne) laser, Nd-ion solid laser made of neodium (Nd)-Yag ($Y_3Al_5O_{12}$) and the like, semiconductor laser (Laser Diode: LD), solid laser utilizing the phenomenon of optical second harmonic-wave generation (SHG).

Along an optical path for an excited light from the laser device 19 is provided a beam expander 21 for collimating the excited light. Along an optical path for the excited light from the beam expander 21 is provided a beam scanning element 23 for scanning the excited light, such as a galvano-mirror or AOD (Acousto-Optics Device).

Along an optical path for the excited light from the beam scanning element 23 is provided dichroic mirror 25 for reflecting the excited light from the